

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE DIVISIONAL APPLICATION

OF: KLINTZ ET AL.

SERIAL NO. TO BE ASSIGNED

FILED: HEREWITH

FOR: SUBSTITUTED 3-PHENYLURACILS

Honorable Commissioner of
Patents and Trademarks
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

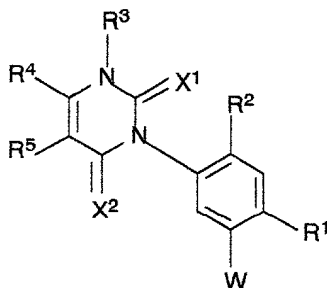
This is a Divisional application of Application Serial No. 08/774,722, filed on January 03, 1997.

The Divisional application is drawn to non-elected subject matter which was canceled from the claims during the prosecution of the parent application. Kindly amend the Divisional Application for further prosecution as follows:

IN THE CLAIMS:

Amend Claims 1 to 7 to read as follows:

1. (amended) [Substituted 3-phenyluracils] A 3-phenyluracil of [the general] formula I



(1)

where

X^1 and X^2 are each oxygen or sulfur;

W is $[-C(R^8)=X^5, -C(R^8)(X^3R^6)(X^4R^7),] -C(R^8)=C(R^9)-CN,$
 $-C(R^8)=C(R^9)-CO-R^{10}, -CH(R^8)-CH(R^9)-CO-R^{10}, -C(R^8)=C(R^9)-CH_2-$
 $CO-R^{10}, -C(R^8)=C(R^9)-C(R^{11})=C(R^{12})-CO-R^{10}$ or
 $-C(R^8)=C(R^9)-CH_2-CH(R^{13})-CO-R^{10}$ where

$[X^3$ and X^4 are each oxygen or sulfur;]

$[X^5$ is oxygen, sulfur or a radical- NR^{14} ;]

$[R^{14}$ is hydrogen, hydroxyl, C_1 - C_6 -alkyl, C_3 - C_6 -alkenyl, C_3 - C_6 -alkynyl, C_3 - C_6 -cycloalkyl, C_1 - C_6 -haloalkyl, C_1 - C_6 -alkoxy- C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy, C_3 - C_6 -alkenyloxy, C_3 - C_6 -alkynyloxy, C_5 - C_7 -cycloalkoxy, C_5 - C_7 -cycloalkenyloxy, C_1 - C_6 -haloalkoxy, C_3 - C_6 -haloalkenyloxy, hydroxy- C_1 - C_6 -alkoxy, cyano- C_1 - C_6 -alkoxy, C_3 - C_7 -cycloalkyl- C_1 - C_6 -alkoxy, C_1 - C_6 -alkoxy- C_1 - C_6 -alkoxy, C_1 - C_6 -alkoxy- C_3 - C_6 -alkenyloxy, C_1 - C_6 -alkylcarbonyloxy, C_1 - C_6 -haloalkylcarbonyloxy, C_1 - C_6 -alkylcarbonyloxy, C_1 - C_6 -haloalkylcarbonyloxy, C_1 - C_6 -alkoxycarbonyl- C_2 - C_6 -alkoxy, C_1 - C_6 -alkylthio- C_1 - C_6 -alkoxy, di- C_1 - C_6 -alkylamino- C_1 - C_6 -alkoxy, phenyl which may carry from one to three of the following substituents: cyano, nitro, halogen, C_1 - C_6 -alkyl, C_2 - C_6 -alkenyl, C_1 - C_6 -haloalkyl, C_1 - C_6 -alkoxy and C_1 - C_6 -alkoxycarbonyl, phenyl- C_1 - C_6 -alkoxy, phenyl- C_3 - C_6 -alkenyloxy or phenyl- C_3 - C_6 -alkynyloxy, where one or two methylene groups of each of the carbon chains may be replaced with -O-, -S- or -N(C_1 - C_6 -alkyl)- and each phenyl ring may carry from one to three of the following substituents: cyano, nitro, halogen, C_1 - C_6 -alkyl, C_2 - C_6 -alkenyl, C_1 - C_6 -haloalkyl, C_1 - C_6 -alkoxy, C_1 - C_6 -alkoxycarbonyl, heterocyclyl, heterocyclyl- C_1 - C_6 -alkoxy, heterocyclyl- C_3 - C_6 -alkenyloxy or heterocyclyl- C_3 - C_6 -alkynyloxy, where one or two methylene groups of each of the carbon chains may be replaced with -O-, -S- or -N(C_1 - C_6 -alkyl)- and the heterocyclyl ring may be from three-membered to sevenmembered and saturated, unsaturated or aromatic and may contain from one to four hetero atoms selected from a group consisting of one or two oxygen or sulfur atoms and up to four nitrogen atoms and furthermore may carry from one to three of the following substituents: cyano, nitro, halogen, C_1 - C_6 -alkyl, C_2 - C_6 -alkenyl, C_1 - C_6 -haloalkyl, C_1 - C_6 -alkoxy or C_1 - C_6 -alkoxycarbonyl,]

[or -N(R^{15}) R^{16} , where]

$[R^{15}$ and R^{16} are each hydrogen, C_1 - C_6 -alkyl, C_3 - C_6 -alkenyl, C_3 - C_6 -alkynyl, C_3 - C_6 -cycloalkyl, C_1 - C_6 -haloalkyl, C_1 - C_6 -alkoxy- C_1 - C_6 -alkyl, C_1 - C_6 -alkylcarbonyl, C_1 - C_6 -alkoxycarbonyl, C_1 - C_6 -alkoxy-carbonyl- C_1 - C_6 -alkyl or C_1 - C_6 -alkoxycarbonyl- C_2 - C_6 -alkenyl, where the alkenyl chain may additionally carry from one to three of the following radicals: halogen and cyano or phenyl which may

carry from one to three of the following substituents: cyano, nitro, halogen, C₁-C₆-alkyl, C₁-C₆-haloalkyl, C₃-C₆-alkenyl, C₁-C₆-alkoxy and C₁-C₆-alkoxycarbonyl, or]

[R¹⁵ and R¹⁶ together with the common nitrogen atom form a saturated or unsaturated 4-membered to 7-membered heterocyclic structure, where one ring member may be replaced with -O-, -S-, -N=, -NH- or -N(C₁-C₆-alkyl)-;]

[R⁶ and R⁷ are each C₁-C₆-alkyl, C₁-C₆-haloalkyl, C₃-C₆-alkenyl, C₃-C₆-alkynyl, C₁-C₆-alkoxy-C₁-C₆-alkyl, or]

[R⁶ and R⁷ together form a saturated or unsaturated, two-membered to four-membered carbon chain which may carry an oxo substituent, where one member of this chain may be replaced with an oxygen, sulfur or nitrogen atom which is not adjacent to X³ and X⁴, and where the chain may carry from one to three of the following radicals: cyano, nitro, amino, halogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₁-C₆-alkoxy, C₂-C₆-alkenyloxy, C₂-C₆-alkynyloxy, C₁-C₆-haloalkyl, cyano-C₁-C₆-alkyl, hydroxy-C₁-C₆-alkyl, C₁-C₆-alkoxy-C₁-C₆-alkyl, C₃-C₆-alkenyloxy-C₁-C₆-alkyl, C₃-C₆-alkynyloxy-C₁-C₆-alkyl, C₃-C₇-cycloalkyl, C₃-C₇-cycloalkoxy, carboxyl, C₁-C₆-alkoxycarbonyl, C₁-C₆-alkylcarbonyloxy-C₁-C₆-alkyl and phenyl which may carry from one to three of the following radicals: halogen, cyano, nitro, amino, C₁-C₆-alkyl, C₁-C₆-haloalkyl, C₁-C₆-alkoxy and C₁-C₆-alkoxycarbonyl, and where the chain may furthermore be substituted by a fused-on or spiral-bonded three-membered to seven-membered ring, and one or two carbon atoms of this ring may be replaced with oxygen, sulfur and unsubstituted or C₁-C₆-alkyl-substituted nitrogen atoms and this ring may carry one or two of the following substituents: cyano, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₁-C₆-alkoxy, C₁-C₆-cyanoalkyl, C₁-C₆-haloalkyl and C₁-C₆-alkoxycarbonyl;]

R⁸ is hydrogen, cyano, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, C₁-C₆-haloalkyl, C₃-C₇-cycloalkyl, C₁-C₆-alkoxy-C₁-C₆-alkyl or C₁-C₆-alkoxycarbonyl;

R⁹ and R¹² are each hydrogen, cyano, halogen, C₁-C₆-alkyl, C₁-C₆-alkoxy, halo-C₁-C₆-alkyl, C₁-C₆-alkylcarbonyl or C₁-C₆-alkoxycarbonyl;

R¹⁰ is hydrogen, O-R¹⁷, S-R¹⁷, C₁-C₆-alkyl which may furthermore carry one or two C₁-C₆-alkoxy substituents, or [R¹⁰ is]

C₃-C₆-alkenyl, C₃-C₆-alkynyl, C₁-C₆-haloalkyl, C₃-C₆-cycloalkyl, C₁-C₆-alkylthio-C₁-C₆-alkyl, C₁-C₆-alkyliminoxy, -N(R¹⁵)R¹⁶ or

phenyl which [may carry] is unsubstituted or carries from one to three of the following substituents: cyano, nitro, halogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₁-C₆-haloalkyl, C₁-C₆-alkoxy [or] and C₁-C₆-alkoxycarbonyl,

R¹⁵ and R¹⁶ are each hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkynyl, C₃-C₆-cycloalkyl, C₁-C₆-haloalkyl, C₁-C₆-alkoxy-C₁-C₆-alkyl, C₁-C₆-alkylcarbonyl, C₁-C₆-alkoxycarbonyl, C₁-C₆-alkoxycarbonyl-C₁-C₆-alkyl or C₁-C₆-alkoxycarbonyl-C₂-C₆-alkenyl, where the alkenyl chain is unsubstituted or carries from one to three of the following radicals: halogen and cyano, or phenyl which is unsubstituted or carries from one to three of the following substituents: cyano, nitro, halogen, C₁-C₆-alkyl, C₁-C₆-haloalkyl, C₃-C₆-alkenyl, C₁-C₆-alkoxy and C₁-C₆-alkoxycarbonyl, or

R¹⁵ and R¹⁶ together with the common nitrogen atom form a saturated or unsaturated 4-membered to 7-membered heterocyclic structure, where one ring member is optionally replaced by -O-, -S-, -N=, -NH- or -N(C₁-C₆-alkyl)-;

R¹⁷ is hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkynyl, C₃-C₇-cycloalkyl, C₁-C₆-haloalkyl, C₃-C₆-haloalkenyl, cyano-C₁-C₆-alkyl, C₁-C₆-alkoxy-C₁-C₆-alkyl, C₁-C₆-alkylthio-C₁-C₆-alkyl, [or] C₁-C₆-alkyloximino-C₁-C₆-alkyl, C₁-C₆-alkylcarbonyl, C₁-C₆-alkoxycarbonyl, C₁-C₆-alkylcarbonyl-C₁-C₆-alkyl, C₁-C₆-alkoxycarbonyl-C₁-C₆-alkyl,

phenyl or phenyl-C₁-C₆-alkyl, where each of the phenyl radicals [in turn may carry] is unsubstituted or carries from one to three of the following substituents: cyano, nitro, halogen, C₁-C₆-alkyl, C₁-C₆-haloalkyl, C₃-C₆-alkenyl, C₁-C₆-alkoxy and C₁-C₆-alkoxycarbonyl;

R¹¹ is hydrogen, cyano, halogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkynyl, C₁-C₆-alkoxy-C₁-C₆-alkyl, C₁-C₆-alkylcarbonyl, C₁-C₆-alkoxycarbonyl,

-NR¹⁸R¹⁹, where R¹⁸ and R¹⁹ have the same meanings as R¹⁵ and R¹⁶, or

phenyl which [may furthermore carry] is unsubstituted or carries from one to three of the following substituents:

cyano, nitro, halogen, C₁-C₆-alkyl, C₁-C₆-haloalkyl, C₃-C₆-alkenyl, C₁-C₆-alkoxy and C₁-C₆-alkoxycarbonyl;

R¹³ is hydrogen, cyano, C₁-C₆-alkyl or C₁-C₆-alkoxycarbonyl; or

R⁹ and R¹⁰ together form a two-membered to five-membered carbon chain in which one carbon atom may be replaced with oxygen, sulfur or unsubstituted or C₁-C₆-alkyl-substituted nitrogen;

R¹ is halogen, cyano, nitro or trifluoromethyl;

R² is hydrogen or halogen;

R³ is hydrogen, nitro, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkynyl, C₃-C₈-cycloalkyl, C₃-C₈-cycloalkylcarbonyl, cyano-C₁-C₆-alkyl, C₁-C₆-haloalkyl, C₁-C₆-alkoxy-C₁-C₆-alkyl, formyl, C₁-C₆-alkenyl, C₁-C₆-alkoxycarbonyl, C₁-C₆-haloalkylcarbonyl, C₁-C₆-alkylcarbonyl-C₁-C₆-alkyl, C₁-C₆-alkoxycarbonyl-C₁-C₆-alkyl;

a group -N(R²⁰)R²¹, where R²⁰ and R²¹ have one of the meanings of R¹⁵ and R¹⁶;

phenyl or phenyl-C₁-C₆-alkyl, where each phenyl ring [may carry] is unsubstituted or carries from one to three of the following radicals: cyano, nitro, halogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₁-C₆-haloalkyl, C₁-C₆-alkoxy and C₁-C₆-alkoxycarbonyl;

R⁴ is hydrogen, cyano, nitro, halogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, C₃-C₈-cycloalkyl, C₁-C₆-haloalkyl, C₁-C₆-hydroxyalkyl, cyano-C₁-C₆-alkyl, C₁-C₆-alkoxy, C₁-C₆-alkylthio, C₁-C₆-alkoxy-C₁-C₆-alkyl, C₁-C₆-alkylthio-C₁-C₆-alkyl or phenyl which [may carry] is unsubstituted or carries from one to three of the following radicals: cyano, nitro, halogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₁-C₆-haloalkyl, C₁-C₆-alkoxy and C₁-C₆-alkoxycarbonyl;

R⁵ is hydrogen, cyano, nitro, halogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, C₃-C₇-cycloalkyl, C₁-C₆-haloalkyl, C₁-C₆-hydroxyalkyl, cyano-C₁-C₆-alkyl, C₁-C₆-alkoxy-C₁-C₆-alkyl, C₁-C₆-alkylthio-C₁-C₆-alkyl, formyl, C₁-C₆-alkylcarbonyl, C₁-C₆-haloalkylcarbonyl, C₁-C₆-alkoxycarbonyl, C₁-C₆-alkoxy-carbonyl-C₂-C₆-alkenyl,

-N(R²²)R²³, where R²² and R²³ have one of the meanings of R¹⁵ and R¹⁶, or

phenyl which [may carry] is unsubstituted or carries from one to three of the following radicals: cyano, nitro, halogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₁-C₆-haloalkyl, C₁-C₆-alkoxy and C₁-C₆-alkoxycarbonyl, or

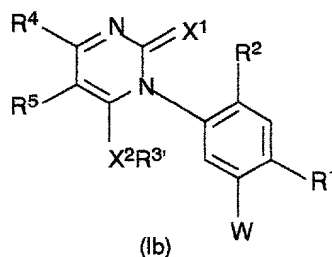
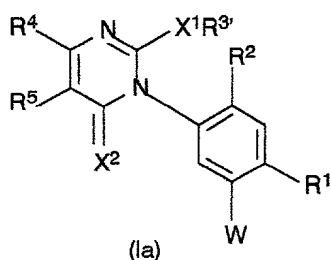
R⁴ and R⁵ together form a saturated or unsaturated 3-membered or 4-membered carbon chain which [may contain] optionally contains from one to three of the following hetero atoms: 1 or 2 oxygen atoms, 1 or 2 sulfur atoms and from 1 to 3 nitrogen atoms, and the chain [may furthermore carry] is unsubstituted or carries from one to three of the following radicals: cyano, nitro, amino, halogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₁-C₆-alkoxy, C₁-C₆-alkylthio and C₁-C₆-alkoxycarbonyl;

with the proviso that R⁴ [may] is not [be] trifluoromethyl [at the same time as] when R⁵ is hydrogen [when] and W is -CH=CH-CO-R¹⁰ where R¹⁰ is C₁-C₆-alkoxy or C₃-C₇-cycloalkoxy, and

with the proviso that R⁹ is halogen when R⁴ and R⁵ are [not] simultaneously hydrogen [when] and W is CH(R⁸)-CH(R⁹)-CO-R¹⁰ [and R⁹ is not halogen],

[and the salts and enol ethers] or a salt or an enol form of [those compounds] the compound of formula I in which R³ is hydrogen.

2. (amended) [Compounds of] An enol ether of the compound of formula I defined in claim 1 represented by [the general] formula Ia or formula Ib



[where the variables R¹, R², R⁴, R⁵, X¹, X² and W have the meanings stated in claim 1 and] wherein R^{3'} is [one of the following groups:] C₁-C₆-alkyl, C₃-C₆-alkenyl or C₃-C₆-alkynyl,

with the proviso that R⁴ [may] is not [be] trifluoromethyl [at the same time as] when R⁵ is hydrogen [when] and W is -CH=CH-CO-R¹⁰ where R¹⁰ is C₁-C₆-alkoxy or C₃-C₆-cycloalkoxy.

3. (amended) [A] The compound [as claimed] of formula I defined in claim 1 or [2] its salt or enol form, wherein W is [-C(R⁸)=X⁵, -C(R⁸)(X³R⁶)(X⁴R⁷),] -C(R⁸)=C(R⁹)-CO-R¹⁰ or -CH(R⁸)-CH(R⁹)-CO-R¹⁰.

4. (amended) [A] The compound [as claimed] of formula I defined in claim 1 [or 2], wherein R³ is C₁-C₆-alkyl.
5. (amended) [A] The compound [as claimed] of formula I defined in claim 1 or [2] its salt or enol form, wherein R² is hydrogen or fluorine.
6. (amended) [A] The compound [as claimed] of formula I defined in claim 1 or [2] its salt or enol form, wherein R¹ is chlorine or bromine.
7. (amended) [A] The compound [as claimed] of formula I defined in claim 1 or [2] its salt or enol form, wherein R⁴ is C₁-C₆-haloalkyl.

Cancel Claims 8 to 11. Amend Claims 12 to 18 to read as follows:

12. (amended) A [herbicide containing] herbicidal composition comprising an inert liquid or solid carrier and [a herbicidal] an effective amount of at least one [substituted] 3-phenyluracil of [the] formula I [as claimed] defined in claim 1, [or of the formula Ia or Ib as claimed in claim 2] or [a] the salt or [an] the enol [ether] form of [those compounds] the compound of formula I in which R³ is hydrogen.
13. (amended) A method for controlling undesirable plant growth, wherein [a herbicidal] an effective amount of [a substituted] the 3-phenyluracil of [the] formula I [as claimed] defined in claim 1, [or of the formula Ia or Ib as claimed in claim 2] or [a] the salt or [an] the enol [ether] form of [those compounds] the compound of formula I in which R³ is hydrogen, is allowed to act on plants, on their habitat or on seed.
14. (amended) [An agent] A composition for the desiccation [and] or defoliation of plants[, containing, in addition to] comprising conventional additives[, and an effective amount[, having a defoliant or desiccant effect,] of at least one [substituted] 3-phenyluracil of [the] formula I [as claimed] defined in claim 1, [or of the formula Ia or Ib as claimed in claim 2] or [a] the salt or [an] the enol [ether] form of [those compounds] the compound of formula I in which R³ is hydrogen.
15. (amended) A method for the desiccation [and] or defoliation of plants, wherein an effective amount[, having a defoliant and/or des-

iccant effect,] of [a substituted] the 3-phenyluracil of formula I [as claimed] defined in claim 1 [or Ia or Ib as claimed in claim 2] is allowed to act on the plants.

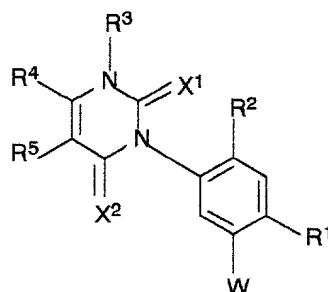
16. (amended) [A] The method [as claimed in] of claim 15, wherein cotton is defoliated.
17. (amended) A [pesticide containing] pesticidal composition comprising an inert [carriers] carrier and [a pesticidal] an effective amount of at least one [substituted] 3-phenyluracil of [the] formula I [as claimed] defined in claim 1, [or of the formula Ia or Ib as claimed in claim 2] or [of a] the salt or [of an] the enol [ether] form of [those compounds] the compound of formula I in which R³ is hydrogen.
18. (amended) A method for controlling pests, wherein [a pesticidal] an effective amount of [a substituted] the 3-phenyluracil of [the] formula I [as claimed] defined in claim 1, [or of the formula Ia or Ib as claimed in claim 2] or [of a] the salt or [of an] the enol [ether of those compounds] form of the compound of formula I in which R³ is hydrogen, is allowed to act on pests or their habitat.

Cancel Claim 19. Enter new Claims 20 to 43 as follows:

20. (new) The compound of formula I defined in claim 1, wherein R³ is hydrogen, C₁-C₆-alkyl or C₁-C₆-haloalkyl.
21. (new) The compound of formula I defined in claim 1, wherein R⁴ is C₁-C₆-alkyl or C₁-C₆-haloalkyl, or the salt or enol form thereof when R³ is hydrogen.
22. (new) The compound of formula I defined in claim 1, wherein R⁵ is hydrogen, halogen or C₁-C₆-alkyl, or the salt or enol form thereof when R³ is hydrogen.
23. (new) The compound of formula I defined in claim 1, wherein R⁸ is hydrogen, or the salt or enol form thereof when R³ is hydrogen.
24. (new) The compound of formula I defined in claim 1, wherein R⁹ is halogen or C₁-C₆-alkyl, or the salt or enol form thereof when R³ is hydrogen.

25. (new) The compound of formula I defined in claim 1, wherein R^{10} is $-OR^{17}$ or $-N(R^{15})R^{16}$, or the salt or enol form thereof when R^3 is hydrogen.
26. (new) The enol ether defined in claim 2, wherein W is $-C(R^8)=C(R^9)-CO-R^{10}$ or $-CH(R^8)-CH(R^9)-CO-R^{10}$.
27. (new) The enol ether defined in claim 2, wherein R^3 is C_1-C_6 -alkyl.
28. (new) The enol ether defined in claim 2, wherein R^2 is hydrogen or fluorine.
29. (new) The enol ether defined in claim 2, wherein R^1 is chlorine or bromine.
30. (new) The enol ether defined in claim 2, wherein R^4 is C_1-C_6 -haloalkyl.
31. (new) The enol ether defined in claim 2, wherein R^4 is C_1-C_6 -alkyl or C_1-C_6 -haloalkyl.
32. (new) The enol ether defined in claim 2, wherein R^5 is hydrogen, halogen or C_1-C_6 -alkyl.
33. (new) The enol ether defined in claim 2, wherein R^8 is hydrogen.
34. (new) The enol ether defined in claim 2, wherein R^9 is halogen or C_1-C_6 -alkyl.
35. (new) The enol ether defined in claim 2, wherein R^{10} is $-OR^{17}$ or $-N(R^{15})R^{16}$.
36. (new) A herbicidal composition comprising an inert liquid or solid carrier and an effective amount of at least one enol ether of formula Ia or Ib defined in claim 2.
37. (new) A method for controlling undesirable plant growth, wherein an effective amount of the enol ether of formula Ia or Ib defined in claim 2 is allowed to act on plants, on their habitat or on seed.
38. (new) A composition for the desiccation or defoliation of plants comprising conventional additives and an effective amount of at least one enol ether of formula Ia or Ib defined in claim 2.

39. (new) A method for the desiccation or defoliation of plants, wherein an effective amount of the enol ether of formula Ia or Ib defined in claim 2 is allowed to act on the plants.
40. (new) The method of claim 39, wherein cotton is defoliated.
41. (new) A pesticidal composition comprising an inert carrier and an effective amount of at least one enol ether of formula Ia or Ib defined in claim 2.
42. (new) A method for controlling pests, wherein an effective amount of the enol ether of formula Ia or Ib defined in claim 2 is allowed to act on pests or their habitat.
43. (new) A 3-phenyluracil of formula I



(I)

where

X¹ and X² are each oxygen or sulfur;

W is -C(R⁸)=C(R⁹)-CN, -C(R⁸)=C(R⁹)-CO-R¹⁰, -CH(R⁸)-CH(R⁹)-CO-R¹⁰, -C(R⁸)=C(R⁹)-CH₂-CO-R¹⁰, -C(R⁸)=C(R⁹)-C(R¹¹)=C(R¹²)-CO-R¹⁰ or -C(R⁸)=C(R⁹)-CH₂-CH(R¹³)-CO-R¹⁰ where

R⁸ is hydrogen, cyano, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, C₁-C₆-haloalkyl, C₃-C₇-cycloalkyl, C₁-C₆-alkoxy-C₁-C₆-alkyl or C₁-C₆-alkoxycarbonyl;

R⁹ and R¹² are each hydrogen, cyano, halogen, C₁-C₆-alkyl, C₁-C₆-alkoxy, halo-C₁-C₆-alkyl, C₁-C₆-alkylcarbonyl or C₁-C₆-alkoxycarbonyl;

R¹⁰ is hydrogen, O-R¹⁷, S-R¹⁷, C₁-C₆-alkyl which may furthermore carry one or two C₁-C₆-alkoxy substituents, or

C₃-C₆-alkenyl, C₃-C₆-alkynyl, C₁-C₆-haloalkyl, C₃-C₆-cycloalkyl, C₁-C₆-alkylthio-C₁-C₆-alkyl, C₁-C₆-alkyliminoxy, -N(R¹⁵)R¹⁶ or

phenyl which is unsubstituted or carries from one to three of the following substituents: cyano, nitro, halo-

gen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₁-C₆-haloalkyl, C₁-C₆-alkoxy and C₁-C₆-alkoxycarbonyl,

R¹⁵ and R¹⁶ are each hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkynyl, C₃-C₆-cycloalkyl, C₁-C₆-haloalkyl, C₁-C₆-alkoxy-C₁-C₆-alkyl, C₁-C₆-alkylcarbonyl, C₁-C₆-alkoxycarbonyl, C₁-C₆-alkoxycarbonyl-C₁-C₆-alkyl or C₁-C₆-alkoxycarbonyl-C₂-C₆-alkenyl, where the alkenyl chain is unsubstituted or carries from one to three of the following radicals: halogen and cyano, or phenyl which is unsubstituted or carries from one to three of the following substituents: cyano, nitro, halogen, C₁-C₆-alkyl, C₁-C₆-haloalkyl, C₃-C₆-alkenyl, C₁-C₆-alkoxy and C₁-C₆-alkoxycarbonyl, or

R¹⁵ and R¹⁶ together with the common nitrogen atom form a saturated or unsaturated 4-membered to 7-membered heterocyclic structure, where one ring member is optionally replaced by -O-, -S-, -N=, -NH- or -N(C₁-C₆-alkyl)-;

R¹⁷ is hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkynyl, C₃-C₇-cycloalkyl, C₁-C₆-haloalkyl, C₃-C₆-haloalkenyl, cyano-C₁-C₆-alkyl, C₁-C₆-alkoxy-C₁-C₆-alkyl, C₁-C₆-alkylthio-C₁-C₆-alkyl, C₁-C₆-alkyloximino-C₁-C₆-alkyl, C₁-C₆-alkylcarbonyl, C₁-C₆-alkoxycarbonyl, C₁-C₆-alkylcarbonyl-C₁-C₆-alkyl, C₁-C₆-alkoxycarbonyl-C₁-C₆-alkyl,

phenyl or phenyl-C₁-C₆-alkyl, where each of the phenyl radicals is unsubstituted or carries from one to three of the following substituents: cyano, nitro, halogen, C₁-C₆-alkyl, C₁-C₆-haloalkyl, C₃-C₆-alkenyl, C₁-C₆-alkoxy and C₁-C₆-alkoxycarbonyl;

R¹¹ is hydrogen, cyano, halogen, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkynyl, C₁-C₆-alkoxy-C₁-C₆-alkyl, C₁-C₆-alkylcarbonyl, C₁-C₆-alkoxycarbonyl,

-NR¹⁸R¹⁹, where R¹⁸ and R¹⁹ have the same meanings as R¹⁵ and R¹⁶, or

phenyl which is unsubstituted or carries from one to three of the following substituents: cyano, nitro, halogen, C₁-C₆-alkyl, C₁-C₆-haloalkyl, C₃-C₆-alkenyl, C₁-C₆-alkoxy and C₁-C₆-alkoxycarbonyl;

R¹³ is hydrogen, cyano, C₁-C₆-alkyl or C₁-C₆-alkoxycarbonyl;
or

R⁹ and R¹⁰ together form a two-membered to five-membered carbon chain in which one carbon atom may be replaced with oxygen, sulfur or unsubstituted or C₁-C₆-alkyl-substituted nitrogen;

R¹ is halogen, cyano, nitro or trifluoromethyl;

R² is hydrogen or halogen;

R³ is hydrogen, nitro, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkynyl, C₃-C₈-cycloalkyl, C₃-C₈-cycloalkylcarbonyl, cyano-C₁-C₆-alkyl, C₁-C₆-haloalkyl, C₁-C₆-alkoxy-C₁-C₆-alkyl, formyl, C₁-C₆-alkanoyl, C₁-C₆-alkoxycarbonyl, C₁-C₆-haloalkylcarbonyl, C₁-C₆-alkylcarbonyl-C₁-C₆-alkyl, C₁-C₆-alkoxycarbonyl-C₁-C₆-alkyl;

a group -N(R²⁰)R²¹, where R²⁰ and R²¹ have one of the meanings of R¹⁵ and R¹⁶;

phenyl or phenyl-C₁-C₆-alkyl, where each phenyl ring is unsubstituted or carries from one to three of the following radicals: cyano, nitro, halogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₁-C₆-haloalkyl, C₁-C₆-alkoxy and C₁-C₆-alkoxycarbonyl;

R⁴ is hydrogen, cyano, nitro, halogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, C₃-C₈-cycloalkyl, C₁-C₆-haloalkyl, C₁-C₆-hydroxyalkyl, cyano-C₁-C₆-alkyl, C₁-C₆-alkoxy, C₁-C₆-alkylthio, C₁-C₆-alkoxy-C₁-C₆-alkyl, C₁-C₆-alkylthio-C₁-C₆-alkyl or phenyl which is unsubstituted or carries from one to three of the following radicals: cyano, nitro, halogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₁-C₆-haloalkyl, C₁-C₆-alkoxy and C₁-C₆-alkoxycarbonyl;

R⁵ is hydrogen, cyano, nitro, halogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, C₃-C₇-cycloalkyl, C₁-C₆-haloalkyl, C₁-C₆-hydroxyalkyl, cyano-C₁-C₆-alkyl, C₁-C₆-alkoxy-C₁-C₆-alkyl, C₁-C₆-alkylthio-C₁-C₆-alkyl, formyl, C₁-C₆-alkylcarbonyl, C₁-C₆-haloalkylcarbonyl, C₁-C₆-alkoxycarbonyl, C₁-C₆-alkoxycarbonyl-C₂-C₆-alkenyl,

-N(R²²)R²³, where R²² and R²³ have one of the meanings of R¹⁵ and R¹⁶, or

phenyl which is unsubstituted or carries from one to three of the following radicals: cyano, nitro, halogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₁-C₆-haloalkyl, C₁-C₆-alkoxy and C₁-C₆-alkoxycarbonyl, or

R⁴ and R⁵ together form a saturated or unsaturated 3-membered or 4-membered carbon chain which optionally contains from one to three of the following hetero atoms: 1 or 2 oxygen atoms, 1 or 2 sulfur atoms and from 1 to 3 nitrogen atoms, and the chain is unsubstituted or carries from one to three of the following radicals: cyano, nitro, amino, halogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₁-C₆-alkoxy, C₁-C₆-alkylthio and C₁-C₆-alkoxycarbonyl;

with the proviso that R⁴ is not trifluoromethyl when R⁵ is hydrogen and W is -CH=CH-CO-R¹⁰ where R¹⁰ is C₁-C₆-alkoxy or C₃-C₇-cycloalkoxy, and

with the proviso that R⁹ is halogen when R⁴ and R⁵ are simultaneously hydrogen and W is CH(R⁸)-CH(R⁹)-CO-R¹⁰,

or a salt of the compound of formula I in which R³ is hydrogen, or an enol form of the compound of formula I in which R³ is hydrogen, C₁-C₆-alkyl, C₃-C₆-alkenyl or C₃-C₆-alkynyl.

IN THE SPECIFICATION:

Amend page 1 as follows:

- after the title and prior to the first paragraph insert the following:

--This application is a Divisional application of Application Serial No. 08/774,722, filed January 03, 1997, which is a FWC application of Application Serial No. 08/211,067, filed March 18, 1994.--.

R E M A R K S

Claims 1 to 7, 12 to 18 and 20 to 43 are now pending in this case. Claims 8 to 11 and 19 have been canceled, and Claims 20 to 43 have been added. Claims 1 to 7 and 12 to 18 have been revised for clarity, and have been amended to avoid overlap with the subject matter claimed in the parent application. Further, the claims were amended to remove multiple dependency and the so deleted subject matter was entered as a new claim (ie. Claims 26 to 30 and 36 to 42). New Claims 20 to 25, 31 to 35 and 43 have been added to further bring out some of the subsidiary embodiments of applicants' invention.

Divisional Application of

Serial No. 08/774,722

KLINTZ et al.


OZ 0050/47953-DIV/Von

The specification has been amended to include a reference to the parent case. No new matter has been added. A separate unmarked copy of the claims as herewith amended and now pending in this application is appended to this paper for the Examiner's convenience.

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees to Deposit Account No. 11.0345. Please credit any excess fees to such deposit account.

Respectfully submitted,

KEIL & WEINKAUF



Herbert B. Keil

Reg. No. 18,967

1101 Connecticut Ave, N.W.
Washington, D.C. 20036
(202) 659-0100

Encl.: THE ACTIVE CLAIMS

HBK/BAS